

AN AMERICAN LEPER.

By D. W. MONTGOMERY, M. D.,

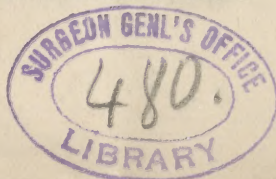
Prof. of Pathology and Clinician for Diseases of the Skin, Medical Department of the University of California; Clinician for Diseases of the Skin, San Francisco Polyclinic.

[Reprinted from "Pacific Medical Journal," April, 1892.]

The contagiousness of leprosy, and the likelihood or unlikelihood of its spread in the United States, and especially in those States fronting the Pacific Ocean, and in active communication with countries where leprosy is endemic, such as China and the Sandwich Islands, is exciting so much attention now, that any case of an American acquiring the disease in the United States becomes of uncommon interest. The conditions obtaining in this country do not seem favorable to the spread of this disease, for even when imported in considerable quantity, and located in a fair degree of concentration, as, for instance, in the case of the Norwegian lepers in Minnesota, G. Armaur Hansen has found it does not even attack the children of leprous parents.

Leprosy and syphilis in their dissemination, as in so many other of their features, form a direct contrast. Syphilis spreads with greatest rapidity in a country where there is commercial activity. In such a condition of society there is a large floating population, among whom husbands and wives are often separated for considerable lengths of time, and the temptation to the illegitimate indulgence of desires, which are perfectly natural and proper in themselves, becomes very strong. For the dissemination of an exceedingly virulent disease like syphilis, where actual contact of abraded surfaces is necessary, this widespread but transient fornication is eminently favorable. One can see, however, that concupiscence may be as great among a poor, stagnant, and over-crowded population as among a commercial people; the difference is, that in the former, lust is necessarily confined in a narrower circle, and this limitation, while unfavorable to the introduction of syphilis, or any other infective disease, is eminently conducive to the maintenance, when introduced, of a slowly inoculable disease like leprosy.

Very interesting in the study of the spread of leprosy is the contrast between the social conditions in Norway and in California. "It is customary on the west coast of Norway, where leprosy is found, for several persons to sleep in the same bed; there are, in fact, too few beds for the population. Hospitality is a sacred duty. If a leper makes a visit he is invited by the host to sleep with him; if he visits a leper, he is invited to share



his bed." (1) And apparently it would be as great an insult to refuse to sleep with a Norwegian of the west coast, as to fail to accept a drink in one of our old-time mining camps. In those parts of Norway the peasantry is wretchedly poor, and used to be much poorer before the present annual harvest of travelers brought money into the country; and the climate is cold, inducing the people to huddle together in miserably small hovels for the sake of warmth. The contrast with this country could hardly be more striking. We have a genial climate, a well paid and actively employed population; new houses built of wood, and not very air tight, because of the absence of the necessity of keeping out frost; and a good, relatively cheap market, well supplied with meat and vegetables. And exactly in accord with this, although we have always a considerable number of lepers here, coming principally from China, the Sandwich Islands, and from Mexico, the occurrence of leprosy in an American who has never been out of the United States is a rarity, which would certainly not be the case if it were nearly so contagious as is generally believed. Bulkley is perfectly right in asserting that leprosy is not a contagious disease in the ordinary acceptance of the term. (2)

On February 29th, 1892, there died at the San Francisco Pest House a leper with the following history:

B., aged forty-three; an American; was born of American parents in Massachusetts, and never was out of the United States excepting a few hours in passing from Buffalo to Detroit over the Canada Southern Railway. About twenty years ago he acquired a sore on the penis after connection with a white woman in Nevada State; no history of secondary symptoms could be elicited. He did not deny that previous to this he might have had frequent connection both with Chinese and Indians, but he said that if so, it was a long time before, and had no connection with the sore. Shortly after the acquisition of the sore, and while still in Nevada, he had charge of a gang of Chinamen on the railroad. There were several Chinese prostitutes in the camp with whom he had frequent connection. He did not remember that any of the Chinese showed any of the symptoms of leprosy, but admitted that they might have had the disease and escaped his notice, as he did not know anything

(1) *Die Ätiologie der Lepra (Studien ueber Lepra in Norwegen)* von G. ARMAUER HANSEN. *Internationale Beiträge zur Wissenschaftlichen Medicin.* Rudolph Virchow's *Festschrift*.

(2) See letter by L. DUNCAN BULKLEY, *New York Medical Record*, March 8th, 1892.

about leprosy at that time. About seven years ago he noticed areas of brown discoloration on the body and limbs, which were diagnosed and treated as syphilis by the doctors whom he consulted. His malady was first correctly interpreted by Dr. Geo. L. Fitch, of San Francisco, about five years ago, and about six months later he entered the San Francisco Pest House, where he remained for two years. He again entered on February 17th, 1890, and remained till his death.

The patient was above medium height, with a well developed bony skeleton. He was bald on the vertex, the remaining hair was brown, and rather dry looking as if not well brushed, but otherwise healthy. The scalp was in good condition. He had neither eyebrows, eyelashes, nor moustache, and the beard was very sparse. The disease was situated especially in the face, hands and forearms, and feet and legs. There were large nodules on the site of the eyebrows, and from there the disease shaded off upwards into the clear scalp above. The eyelids moved a little stiffly from the infiltration, but there was no lagophthalmos, as is so frequently the case in leprosy. The skin of the nose, and of the whole of the lower part of the face was very much thickened, especially the lower lip, which stood out stiff and useless. The patient originally had a light complexion, but when I saw him the skin of the face, hands, and lower part of the legs, and of the feet was a dark coppery color. The skin upon the lesions of the face had the silky soft appearance so often seen in patients suffering from tubercular leprosy. On the skin of the arms and hands, and of the legs and feet there were excoriations, the seat of previously existing pemphigus blebs, which appeared from time to time. The last joint of the ring-finger of the left hand was enlarged and stiff; the movements of the hands were not nearly so deft as formerly, but there was no paralysis, and no wasting of the muscles. He had lost appreciation of touch, and on being handled felt as if a substance were between the fingers of the person and his skin. His extremities were analgesic, and he had recently burnt his fingers in picking up something hot, without experiencing any pain. His appreciation of the sensations of heat and cold was not tested. There was a discoloration, such as he said constituted the first symptoms of his malady, on the inner side of the left leg. It was an irregular, fairly well circumscribed, brown patch about the size of a silver dollar, joined by a narrow isthmus to a similar patch. At the edge of this discoloration there was a lepra nodule, well raised above the level of the skin, and very dark in color. It might easily have been mistaken for a

melanotic sarcoma. This nodule was cut out, and lepra bacilli were found in scrapings from its cut surface. Sections prepared for the microscope showed that its black color was owing to an extraordinary amount of lepra pigment.

The eyeballs were clear, and moved normally, and the sight was good. The skin covering the auricles was normal, a remarkable circumstance considering their liability to be affected, and the advanced stage of the disease. The hearing was good. Both nares were almost completely blocked, so that he could scarcely breathe through them. The epithelium of the dorsum of the tongue was a glittering white, and the surface was marked off by deep furrows running in all directions, but principally longitudinally and transversely. This condition of the tongue is usually found associated with syphilis, and it was the only symptom I could find at all indicative of that disease. He complained he could not eat fish, because of the difficulty in detecting the bones with his tongue, so that the sense of touch was evidently obtunded. The voice was husky and the breathing difficult; in speaking he frequently had to pause to take breath, and at times the hospital attendants were afraid he would smother to death. He said he had not had any sexual desire since the commencement of the disease seven years before, and he blamed, as this class of people frequently do, the mercurial treatment for its extinguishment. The skin of the penis and scrotum was absolutely normal, but there was a small solid swelling in the left cord, and the left epididymis was slightly enlarged but of normal consistency. His mind was clear and his answers terse and to the point.

As Jonathan Hutchinson is an ardent advocate of the theory that the virus of leprosy enters the human being with his food, and that fish is the most likely vehicle, we inquired, with a view to ascertaining the part possibly played by food as a medium of transmission in this case, how the hands fared in such a camp. He answered that the food was always good and abundant, with plenty of fresh meat and very little fish.

It seems to me that this man's opportunities of contracting the disease were excellent, mixed up as he was in the topsy-turvy of a railroad camp with a people among whom leprosy is fairly common.

I wish to acknowledge my indebtedness to Dr. S. J. Hunkin for the adroitness he displayed in obtaining many of the facts made use of in this article from a patient who was particularly taciturn, gruff and difficult to handle.